Rain, Snow and Flooding Filled Eastern Idaho Headlines throughout the 2006 Water Year

A welcome change came to Eastern Idaho during the 2006 Water Year in the form of an excellent snowpack. Snowpack averaged 120% to 140% of normal for much of the winter and liquid precipitation ranged from 120% to 150% of normal. Following the snowpack, flooding took the headlines as a number of rivers periodically flowed over their banks off and on for nearly three months. A water year, which is the standard period for measuring annual precipitation, is the 12-month period from October 1 through September 30.

Some spring flooding highlights in Eastern Idaho included Magic Reservoir on the Big Wood River, the Big Wood River at Hailey and the Portneuf River. Magic Reservoir went into uncontrolled spill in mid-April, cresting at 5600 cubic feet per second (cfs), which created the potential for flooding in Lincoln and Gooding Counties. Flooding in Lincoln County was primarily in open desert areas where the water quickly returned to the aquifer. Gooding County did experience some flooding of outbuildings, parks and low pastureland, but remained only minor.

Magic Reservoir in uncontrolled spill on April 19, 2006. (NWS Pocatello photo)

The Big Wood River at Hailey initially reached the flood stage of 6.0 feet in mid-May and again in early June, each time flooding a number of homes and agricultural land. On May 21, the Big Wood reported record high flows of 7800 cfs (7.9 feet).

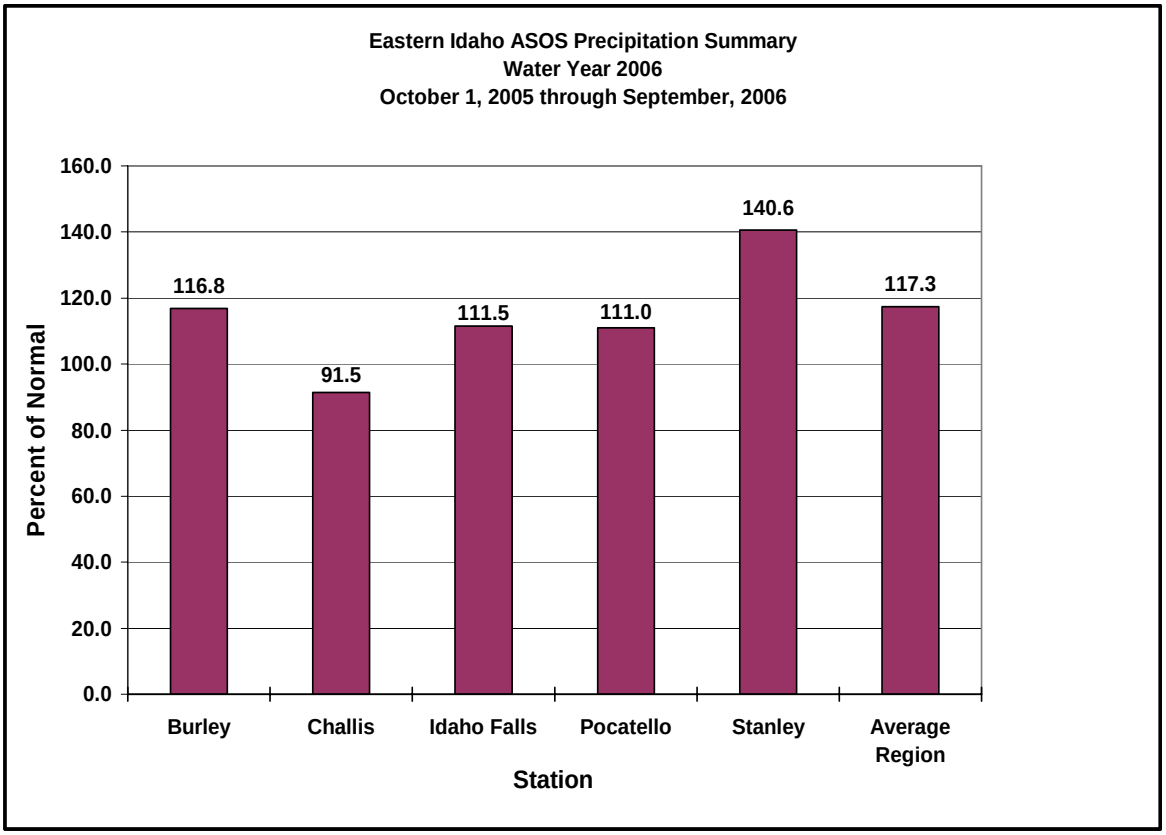
The Portneuf River and its tributaries began flooding due to heavy rains and melting snow from the end of March, through much of April and into late May. Flooding impacted some outbuildings, parks and low pastureland. The river crested at 10.5 feet (1430 cfs) on May 4, which is 2.0 feet above flood stage.

Springtime lake near Inkom that developed from the flooding Portneuf River from April through May 2006. (NWS Pocatello photo)

Regional Precipitation Summary

Referencing five of Eastern Idaho's Automated Surface Observing Systems (ASOS), the region received 117.3% of normal precipitation for the 2006 Water Year. A station summary is below. The Central Mountains lead the region with Stanley topping at 140.6% of normal and Challis with the least at 91.5% of normal.

Station	Water Year Total	Water Year Normal	Departure from Normal	Water Year Percent Normal
Burley	12.02	10.29	1.73	116.8
Challis	7.06	7.72	-0.66	91.5
Idaho Falls	12.29	11.02	1.27	111.5
Pocatello	13.96	12.58	1.38	111.0
Stanley	21.07	14.99	6.08	140.6
Average Region	13.28	11.32	1.96	117.3



Eastern Idaho Water Year 2006 precipitation summary.

2006 Water Supply Forecast Overview
Each year between January and June, National Weather Service River Forecast Centers and the Natural Resources Conservation Service (NRCS) produce water supply forecasts. The forecasts provide an outlook of the expected volume of water to pass by a given point over a period, generally from April to September. Unlike previous drought years, there was not a shortage of water predicted in this year's water supply forecasts.

Water supply forecasts ranged from 115% in the Henry's Fork and Upper Snake basins to over 150% in the Big Wood basin due to abundant snowpack. Compare these figures to the bleak forecasts of 2004 with flows 20% to 50% of normal. The April forecast put Magic Reservoir on the Big Wood River at 166%. Camas Creek along the Camas and Blaine County lines topped the list at 189% of normal for the April through July period. As the run-off season continued into late spring, June water supply forecasts rounded out the season with the Snake River about 135% of average and the Big Wood River at 160-180%.

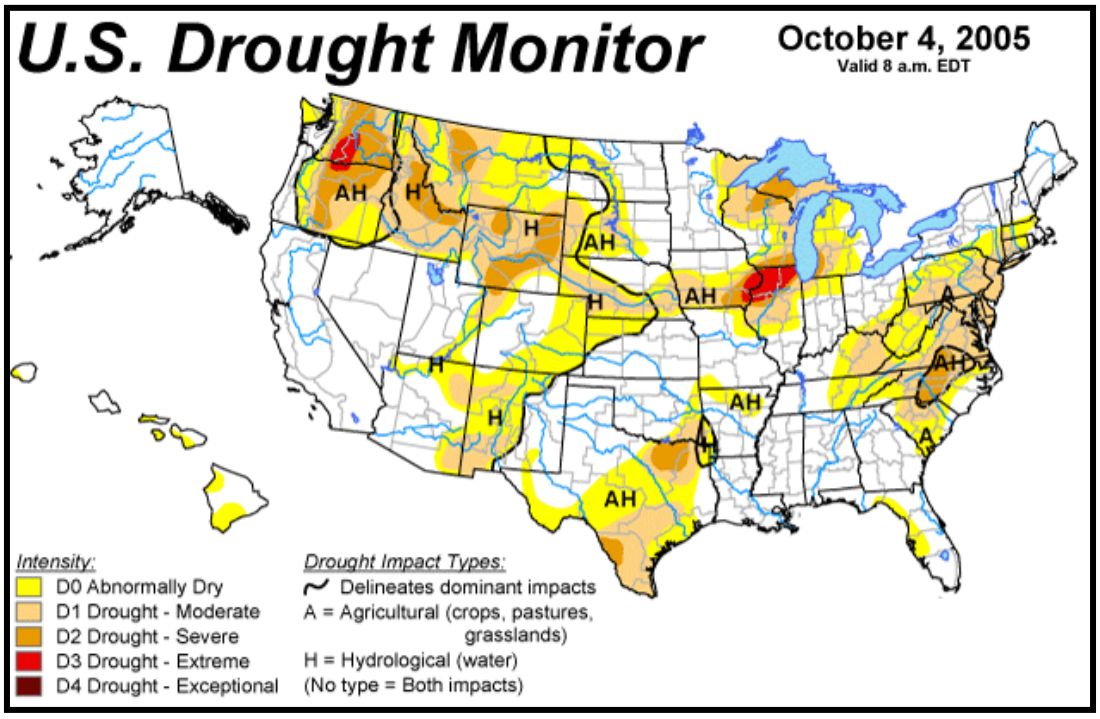
Eastern Idaho Drought Update
The excellent snowpack across Eastern Idaho did wonders for the drought situation. For the first time since June 2000, Idaho was in the clear according to the "Drought Monitor".

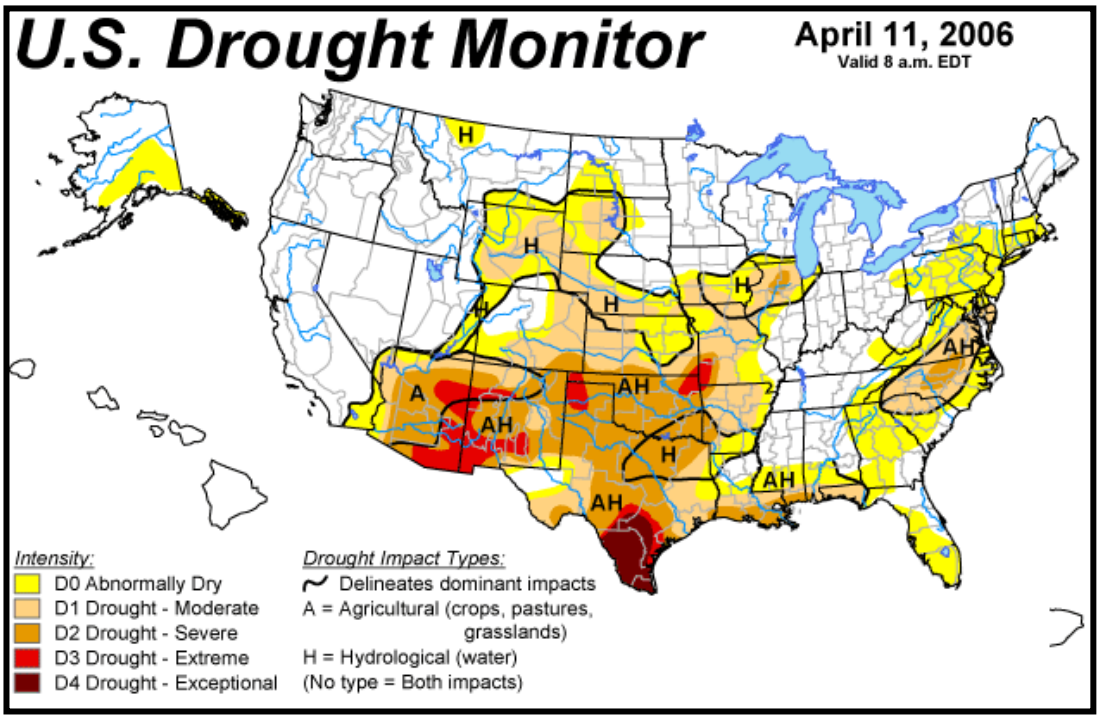
Eastern Idaho's 2006 Water Year began almost entirely in the "Moderate" and "Severe" Drought Monitor (DM) classifications. These conditions remained through December and all classifications were wiped clean by mid-April due to the winter's excellent snowpack. Eastern Idaho stayed in the clear until early August when the DM rand declined to "Abnormally Dry", D0. The "Abnormally Dry" ranking was due to the record-breaking summer temperatures and well-below normal precipitation across the region. Please refer to the Drought Monitor images on the following pages.

The Drought Monitor is a synthesis of multiple indices, outlooks and news accounts that represents a consensus of federal and academic scientists. The result is a national map indicating the severity of drought over an area utilizing five indices, which are:

- D0: Abnormally Dry
- D1: Moderate Drought
- D2: Severe Drought
- D3: Extreme Drought
- D4: Exceptional Drought

The DM is a product of the U.S. Department of Agriculture (USDA), National Oceanic and Atmospheric Administration (NOAA), the Climate Prediction Center and National Climatic Data Center, and the National Drought Mitigation Center located at the University of Nebraska-Lincoln. For more information regarding the Drought Monitor, please visit the Drought Monitor website at drought.unl.edu/dm/monitor.html.


U.S. Drought Monitor
October 4, 2005
Valid 8 a.m. EDT
Intensity:
D0 Abnormally Dry
D1 Drought - Moderate
D2 Drought - Severe
D3 Drought - Extreme
D4 Drought - Exceptional
Drought Impact Types:
Delineates dominant impacts
A = Agricultural (crops, pastures, grasslands)
H = Hydrological (water)
(No type = Both impacts)


U.S. Drought Monitor
April 11, 2006
Valid 8 a.m. EDT
Intensity:
D0 Abnormally Dry
D1 Drought - Moderate
D2 Drought - Severe
D3 Drought - Extreme
D4 Drought - Exceptional
Drought Impact Types:
Delineates dominant impacts
A = Agricultural (crops, pastures, grasslands)
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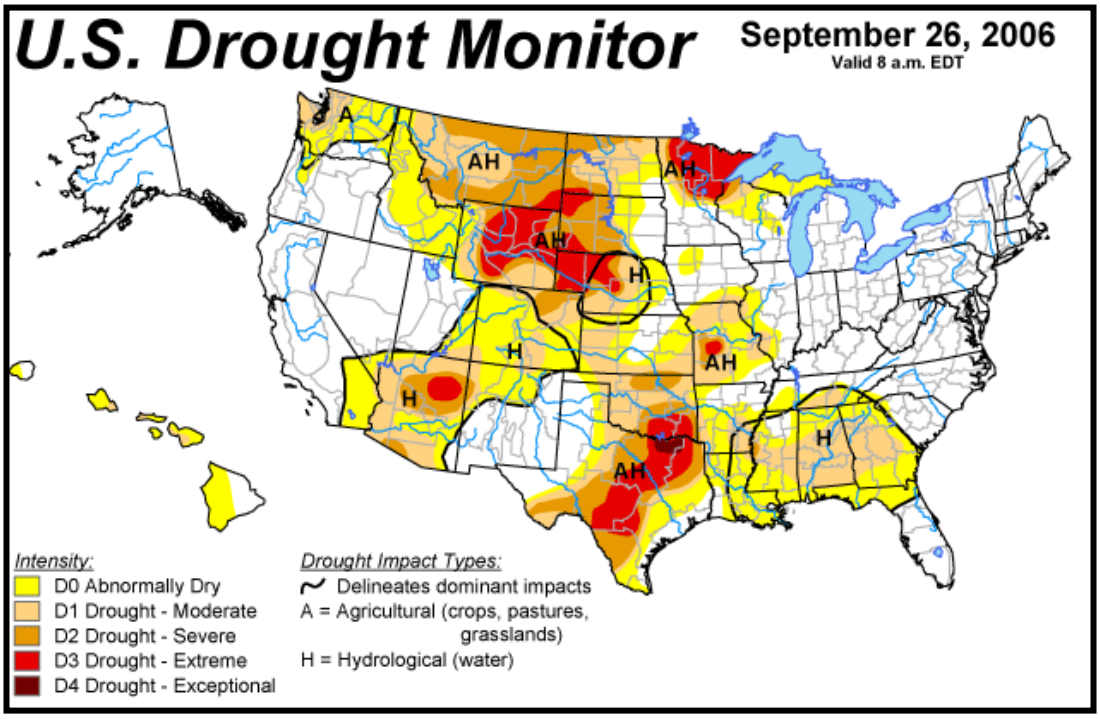
U.S. Drought Monitor
September 26, 2006
Valid 8 a.m. EDT
A
AH
AH
AH
H
H
H
AH
H
AH
Intensity:
D0 Abnormally Dry
D1 Drought - Moderate
D2 Drought - Severe
D3 Drought - Extreme
D4 Drought - Exceptional
Drought Impact Types:
Delineates dominant impacts
A = Agricultural (crops, pastures, grasslands)
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What is in Store for 2007?
Will the drought return or will there be record snowpack this winter? The telltale signal for this winter is the return of El Niño to the Equatorial Pacific. El Niño refers to the phenomenon in the equatorial Pacific Ocean characterized by a positive sea-surface temperature departure from normal greater than or equal to 0.5 degrees Celsius (0.9 degrees Fahrenheit), averaged over three consecutive months.

Typically, the impacts of El Niño show up most clearly during wintertime. For example, most El Niño winters are mild over western Canada and parts of the northern United States, and wet over the southern United States from Texas to Florida. However, El Niño is only one of a number of factors that influences temperate climates. Idaho historically is warmer and drier than normal during strong El Niño episodes from December through February. However, in 1982-83, one of the strongest El Niño's on record, precipitation in some parts of the state was as much as an inch above normal.

With El Niño knocking on winter's door, the Climate Prediction Center forecast anticipates temperatures to be above normal and precipitation to be below normal for the winter. Temperatures are expected to remain above normal and precipitation around the normal range beginning in the spring and lasting through September 2007.

The Climate Prediction Center (CPC) serves the public by assessing and forecasting the impacts of short-term climate variability, to mitigate losses and maximize economic gains. Utilizing El Niño and La Niña conditions in the tropical Pacific and other factors, the CPC develops seasonal climate outlook maps for one to thirteen months in the future. The CPC is part of NOAA's National Weather Service (NWS) under the National Centers for Environmental Prediction (NCEP). You may visit the CPC website at www.cpc.ncep.noaa.gov.

Is the drought over? The past winter's abundant snowpack and wet spring helped return much of Eastern Idaho to normal after the previous six years of drought. Reservoirs filled with some even overtopping, soil moisture improved in most areas and the rivers were running hard. The final area to recover after a drought is the ground water supply, which lags behind in drought recovery. The Eastern Snake River Plain Aquifer, which is approximately the size of Lake Erie, is still lagging, however water storage has improved somewhat. The time it would take for the aquifer to replenish is unknown, however at least two to three winters with well above normal precipitation would be necessary.

Regardless if the drought returns or ends, it is important for everyone to be conscientious of how much water they use on a daily basis and try to conserve. Every little bit helps, so when another drought hits Eastern Idaho, communities will be a little better prepared.

For complete weather, water and climate information, please visit NOAA's National Weather Service website at www.weather.gov.

For local information, please visit the Pocatello NWS website at www.weather.gov/Pocatello or call 208-232-9306.